**K-5 Math Lesson Plan**

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| **Teacher: Manda Stiegel** | | | **Grade: 4th** | | | **Date(s)**: Days 2 and 3 |
| **Unit Title:** Unit 1- Understand Place Value for Multi-Digit Whole Numbers | | | | **Corresponding Unit Task:** Task #1  Chronicle #1 - Animal Statistics | | |
| **Essential Question(s):** How can I represent a multi-digit number using different forms? | | | | | | |
| **Materials/Resources** | | | | **Essential Vocabulary** | | |
| **Teacher:**  Chart paper to create anchor chart  Computer  Ebeam  Destinations | | **Student:**  Base-ten blocks  Place value charts  Math Envisions textbook | | | place value  value  tens  hundreds  thousands  ten-thousands  hundred-thousands  millions  standard form-number name/word form/written form | |
| **Learning Experience** | | | | | | |
| **8 Mathematical Practices:**  1. Make sense of problems and persevere in solving them.  2. Reason abstractly and quantitatively.  3. Construct viable arguments and critique the reasoning of others.  4. Model with mathematics.  5. Use appropriate tools strategically.  6. Attend to precision.  7. Look for and make use of structure.  8. Look for and express regularity in repeated reasoning. | **Common Core State Standards:**  [**4.NBT.2**](http://collab.gcsnc.net/sites/spac007/Shared%20Documents/Units%20(Elementary%20Math)/4th%20Grade/4th%20Grade%20Math%20Unit%201/4.NBT.2P.doc) *Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.*  [4.NBT.1](http://collab.gcsnc.net/sites/spac007/Shared%20Documents/Units%20(Elementary%20Math)/4th%20Grade/4th%20Grade%20Math%20Unit%201/4.NBT.1S.doc) *Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. For example, recognize that 700÷70=10 by applying concepts of place value and division.* | | | | | |
| **I Can Statement(s):**   * I can read multi-digit whole numbers using base-ten numerals. * I can read multi-digit whole numbers using standard form. * I can write multi-digit whole numbers using base-ten numerals. * I can write multi-digit whole numbers using standard form. * I can use base-ten numerals to form multi-digit whole numbers. * I can recognize that a digit in one place represents ten times what it represents in the place to its right. | | | | | |
| **Activating Strategy/Hook:** (How will students become cognitively engaged and focused?)  *Congratulations! You are one out of 100 fourth graders from across the state that has been selected to be a “Junior Zookeeper” at the North Carolina Zoo in Asheboro. Now that you have been chosen, you will spend a weekend completing various tasks with specific animals at the zoo. You will keep a journal to prove to the Zoo Director, Dr. David Jones, that you can fulfill your duties with integrity. If the director feels you have done well, you will be awarded a prize of your choice. You may choose one of the following options: A 5-year zoo membership for you and your family members (a $245 value), $150 cash, or star in the Zoo’s newest television commercial and be given $75 for your time and talent.*  *Since we have just arrived at the zoo, the first thing we need to do today is start building numbers.* | | | | | |
| **Teacher Directed:** Introduce the base-ten blocks. Discuss which blocks are ones, tens, hundreds, and thousands (should be review from 3rd grade). Students will begin working with a partner to build 23. Have students share how they built 23. (Possible answers are 23 ones blocks, 2-tens blocks and 3-ones blocks, or 1-tens block and 13-ones blocks) Put 23 into the place value chart. Discuss what place is the two in, and what value is the two (should be review from 3rd grade). Then have students build 56 using two different ways. Then share which ways they built. Then put into the place value chart. Have students build 102, share, discuss the multiple ways we can build it, and put into place value chart. Continue the conversation about what the values and places are. Then have students build 234 and discuss, and 1,584 and discuss. Depending on how well they are building the numbers using different ways, I may give more numbers to discuss or begin larger numbers. “Since we don’t have enough thousands blocks, working with your table, create 3,514.” Students will play with the hundreds blocks to try to create a thousand. Hopefully, students are beginning to make the connection that ten 100-blocks equal a 1,000. Discuss how they built 3,514. If students come to the realization that ten 100-blocks equal a 1,000 begin anchor chart. If not, give more examples. I do not recommend going over 4,000 since the 100-blocks are also limited.  Anchor Chart-  Start with writing 1. Discuss what this number means.  Add a 0 to make 10. Discuss what this number means.  Add another 0 to make 100. Discuss what this number means. Try to direct conversations that when adding a 0 means multiplying by 10, that 10 x 10 =100. Once they recognize this pattern, “test” to see if it works for a 1,000. Add another 0 to make 1,000. Discuss whether 100 x 10 = 1,000. Make connection to that it took 10 100-blocks to make 1,000.  Add another 0 to make 10,000. Discuss whether 1,000 x 10 = 10,000. Use 10 1,000-blocks to show how it is 10,000.  Add another 0 to make 100,000. Discuss whether 10,000 x 10 = 100,000  Add another 0 to make 1,000,000. Discuss whether 100,000 x 10 = 1,000,000 | | | | | |
| Guided Practice: (Day 2 of the lesson) Destination Math Resources: DM Course III - Module 1 - Unit 1 - Session 1: Whole Numbers to One Million\*\*\*Stop at Screen 3 when they start talking about 756 http://destination.gcsnc.com/content/math/destination\_math/MSC3/msc3/msc3/msc3/msc3/module1/unit1/session1/tutorial.html?USERID=0%26ASSIGNID=0 | | | | | |
| **Independent Practice:** Math enVisions 1-1, pgs. 4 and 5—skipping expanded form questions  Homework—enVisions Pract. Book pg. 1 | | | | | |
| **Closing/Summarizing Strategy:** Ticket out the door for day 1 of lesson: Write the number 19,876 in standard form and word form. How many thousands are in the number? Ticket out the door for day 2 on dry erase boards.  Which of the following is equivalent to one million? \_\_\_\_\_  **a.** Ten ten thousands  **b.** Ten hundred thousands  **c.** Ten one thousands | | | | | |

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| **Differentiation Strategies** | | |
| **Extension** | **Intervention** | **Language Development** |
| Math enVisions-Enrichment Master 1-1 | Destinations **Course II:**   * Module: Number Sense Unit: Numbers to 999 Session: Place Value: Tens and Ones * Module: Number Sense Unit: Numbers to 999 Session: Place Value: Hundreds, Tens, and Ones * Module: Number Sense Unit: Numbers to 9,999 Session: Place Value: Thousands, Hundreds, Tens, and Ones * Spend more time modeling using base-ten blocks * Spend more time modeling with place-value chart   Math enVisions-Reteaching Master 1-1  On Core Math-  Lessons 15 and 16 | Focus heavily on the differences between place value and value. Connect value with money. How much value does this game have? How much value does this bracelet have? Then stress what is the value of the 2 in twenty-three?  With “place,” connect to going places. When asked to go to the place that has food, where do you think to go? Then stress what “place” the 2 in twenty-three is (the tens place).    -Brain Pop Jr. Math—Number Sense—100  <http://www.brainpopjr.com/math/numbersense/>  Brain Pop Jr. Math—Number Sense—Place Value  <http://www.brainpopjr.com/math/numbersense/placevalue/> |
| **Assessment(s):** | | |
| **Teacher Reflection:** (Next steps?) | | |